

In the Claims

1. A pre-formed insulation module for insulating a process component having opposed longitudinally extending contacting surfaces extending along a length thereof and terminal contacting surfaces at each end thereof comprising:

(a) at least one first inner insulation layer being constituted of an insulation material having a capacity to withstand thermal shock under cryogenic conditions and having one surface proximate to a surface of a component to be insulated;

C1 (b) at least one second outer insulation layer disposed radially outwardly of said inner insulation layer;

(c) at least one water vapour barrier layer; and

(d) a cladding layer distinct from said at least one water vapour barrier layer.

2. The module of claim 1 including connection means for connecting said module to an adjacent module for insulating said component.

C2 4. The module of claim 3 wherein said circumferentially disposed connection means are formed in the terminal contacting surfaces and the longitudinally disposed connection means are formed in said longitudinally extending contacting surfaces.

C3 16. The module of claim 1 wherein said inner insulation layer is formed from a first insulation material and said outer insulation layer is formed from a second insulation material said first insulation material having different thermal shock characteristics from those of said second insulation material.

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24. The module of claim 2 wherein said inner insulation layer is formed from a first insulation material and said outer insulation layer is formed from a second insulation material said first insulation material having different thermal shock characteristics from those of said second insulation material.

25. The module of claim 3 wherein said inner insulation layer is formed from a first insulation material and said outer insulation layer is formed from a second insulation material said first insulation material having different thermal shock characteristics from those of said second insulation material.

26. The module of claim 4 wherein said inner insulation layer is formed from a first insulation material and said outer insulation layer is formed from a second insulation material said first insulation material having different thermal shock characteristics from those of said second insulation material.

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